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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,008	03/13/2006	Wilhelm Tobben	14069-00002-US	7345
23416 7590 04/07/2008 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899				
EXAMINER				
JACOBSON, MICHELE LYNN				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
04/07/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/568,008

**Applicant(s)**

TOBBEN ET AL.

**Examiner**

MICHELE JACOBSON

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date 2/10/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 8 recites the limitation "characterized in that layer C comprises an [aliphatic homopolyamide] or [an aliphatic copolyamide] or [a blend of aliphatic homo- and copolyamide] or [a blend of aliphatic homopolyamide and a partly aromatic polyamide] or [optionally a polyolefin homo- or copolymer] or [a blend of these]" (brackets are used to denote the individual materials that can solely compose layer C) for the material comprising layer C recited in claim 1. Claim 1 recites that layer C "comprises as the main component a polyamide or a mixture of several polyamides" and does not recite the limitation that the layer can be comprised only of a polyolefin. The recitation of a polyolefin in claim 8 directly conflicts with the recitation of the composition of layer C in claim 1 since claim 8 can be interpreted to mean that layer C is composed solely of polyolefin, which would not conform to the limitations of claim 1. It is unclear whether applicant intends the polymers of the limitations set forth in claim 8 to further comprise the polyamide layer C recited in claim 1 or if the polymers recited in

claim 8 are meant to further define the polyamides that comprise layer C. Consideration of claim 8 in light of the specification would seem to suggest that applicant intends the polyamides recited in claim 8 to define the polyamide layer C from claim 1. However, the recitation of a polyolefin for this purpose conflicts with claim 1. Since this limitation directly conflicts with claim 1 for the purpose of examination claim 8 will be interpreted as layer C comprises an aliphatic homopolyamide or an aliphatic copolyamide or a blend of aliphatic homo- and copolyamide or a blend of aliphatic homopolyamide and a partly aromatic polyamide. Appropriate clarification is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 6-11, and 14-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pophusen et al. U.S. Patent No. 6,541,087 (hereafter referred to as Pophusen).
6. Pophusen teaches a multilayer, biaxially stretched, heat set, coextruded tubular film made from the following layers disposed from outside to inside (Col. 4, lines 25-47, claim 8):

- a. An outer layer G, which substantially consists of aliphatic polyamide or copolyamide and or partially aromatic polyamide or copolyamide (corresponding to applicant's layer A)
  - b. An interlayer F having oxygen barrier properties between outer layer G and core layer E (corresponding to applicant's layer B)
  - c. A core layer E, which substantially consists of aliphatic polyamide or copolyamide and or partially aromatic polyamide or copolyamide (corresponding to applicant's layer C)
  - d. A coupling layer D (corresponding to applicant's layer D)
  - e. A polyolefinic interlayer C (optional further layer as in f)
  - f. A coupling layer B (corresponding to applicant's layer D)
  - g. An inner layer A, which substantially consists of aliphatic polyamide or copolyamide and or partially aromatic polyamide or copolyamide (Corresponding to applicant's layer E)
7. Preferred polyamides for layers A, E and G are recited to be m-xylylenediamine with adipic acid units (MXD6) and hexamethylenediamine with unites of isophthalic and terephthalic acid (PA 61/6T). The preferred thickness for the layer A is 2-12  $\mu\text{m}$ . (Col. 5, lines 32,44)
8. The coupling layers B and D each comprise preferably a modified polyolefin. Modified polyolefin in the present context is a homo or copolymer of ethylene or propylene each optionally copolymerized with at least one linear  $\alpha$ -olefin having 3 to 8 C atoms, which is grafted with at least one selected monomer from the group consisting of

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$\alpha,\beta$ -unsaturated dicarboxylic acids, (such as for example maleic acid, fumaric acid, itaconic acid) their acid anhydrides, acid esters, acid amides or acid imides. Further suitable copolymers are ionomeric copolymers of ethylene and propylene and optionally further linear  $\alpha$ -olefins containing 3 to 8 C atoms copolymerized with  $\alpha,\beta$ -unsaturated carboxylic acids and/or the metal salts thereof and/or the alkyl esters thereof or graft polymers of the stated monomers onto polymers or partially saponified ethylene/vinyl ester copolymers, which are optionally graft polymerized with a monomer of the stated acids. In a preferred embodiment, the layer thicknesses of the coupling agent layers B and D are between 1 and 6  $\mu\text{m}$ . The composition of layers B, D may be different or identical. (Col. 6, lines 19-37)

9. Layer F having oxygen barrier properties in particular substantially consists of ethylene/vinyl alcohol copolymers produced by saponification of ethylene/vinyl acetate copolymer. The ethylene content is here preferably between 25 and 47 wt. % and in particular between 29 and 38 wt. %. In a preferred embodiment, the layer thickness of layer F is between 2 and 8  $\mu\text{m}$ , in particular between 3 and 6  $\mu\text{m}$ . The sum of all the layer thicknesses of the coextruded casing is 30 to 80  $\mu\text{m}$ , in particular 35 to 65  $\mu\text{m}$ . (Col. 6, lines 38-47) The invention is recited to be suitable for packaging sausage, cheese, pastry and other pasty and liquid foodstuffs. (Col. 7, lines 8-10)

10. Since layer g) is recited in claim 1 to be part of the optional further layers and additives recited in f), the limitation of the tubular article comprising fibers can be interpreted to not be selected. As such, the casing disclosed by Pophusen with layers corresponding to the layers of applicant, as enumerated above, with the compositions

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as recited by Pophusen clearly anticipates the limitations as set forth in claims 1-3, 6-11, and 14-19.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pophusen et al. U.S. Patent No. 6,541,087 (hereafter referred to as Pophusen) and Sears et al. U.S. Patent Application Publication No. 2002/0000683 (hereafter referred to as Sears) as motivated by Toshiaki et al. European Patent Application Publication Number 920808 (hereafter referred to as Toshiaki).

13. Pophusen teaches what has been recited above but is silent regarding disclosing cellulose fibers in an amount of 0.1-70% by total weight of the layer within the layers of the casing.

14. Sears teaches improved composites containing cellulosic pulp fibers dispersed in a matrix, wherein the matrix comprises a polymeric material and said cellulosic pulp fibers comprise greater than 1% and less than 60% by weight of the composite. (Para.

16) Suitable polymeric material includes polyamides. (Para. 24)

15. Toshiaki teaches that fibrous casings are preferred for sausage such a casing has good appearance and can produce an image that the sausages are of high quality.

(Para. 2) Polyamide films such a polyhexamethylene adipamides which are employed as synthetic plastic casings are advantageous in that they give some smoking effect under high humidity conditions, that they have high tensile strength at break, high impact strength, excellent dimensional stability and excellent oxygen barrier properties.

(Para. 3) However, the smoking effect achieved with polyamide films is very small compared with those achieved by fibrous casings. (Para. 3) By the addition of cellulose powder to a polyamide sausage casing its smoking performance is improved and the resulting casing has a matted and grained uneven surface which gives the impression that the encased product is of high quality. (Para. 12)

16. Toshiaki teaches the desirability of disposing cellulose material in polyamide material for sausage casings to improve the appearance of the casing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have disposed cellulose fibers as recited by Sears in the invention of Pophusen in order to achieve the benefit of an aesthetically pleasing sausage casing that implied the high quality of the encased product. The combination of Pophusen and Sears would have resulted in the article as claimed in claims 4 and 5.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELE JACOBSON whose telephone number is (571)272-8905. The examiner can normally be reached on Monday-Thursday 8:30 AM-7 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michele L. Jacobson  
Examiner /M. J./  
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